

## CLAIMS

## WHAT IS CLAIMED IS:

1. A method for analyzing a program, comprising the steps of:  
logging a plurality of stack traces and respective tags in a log file at respective points

3 during execution of the program; and

4 marking one or more interesting tags within the log file.

2. The method according to claim 1, further comprising the step of:

2 producing a report based on the log file.

1 3. The method according to claim 2, wherein the step of producing the report  
2 includes:

3 3 identifying one or more of the stack traces that are associated with any of the one or  
4 more interesting tags; and

5 producing the report based on the identified one or more of the stack traces.

1 4. The method according to claim 2, wherein producing the report includes:

2 identifying a last stack trace that is associated with one of the one or more interesting  
3 tags; and

4 producing the report based on the identified one or more of the stack traces.

1 5. The method according to claim 1, wherein:

2 the tags indicate respective addresses of allocated objects; and

3 the one or more interesting tags indicate one or more respective addresses of migrated  
4 objects.

6. A method for producing a diagnostic report for a program, comprising the steps of:  
2     accessing a log file comprising a list of stack traces and respective tags at respective  
3     points during execution of the program and comprising one or more interesting  
4     tags; and  
5     producing the diagnostic report based on the log file.

1     7. The method according to claim 6, wherein the step of producing the report  
2     includes:

3         identifying one or more of the stack traces that are associated with any of the one or  
4     more interesting tags; and  
5         producing the report based on the identified one or more of the stack traces.

1     8. The method according to claim 6, wherein producing the report includes:  
2         identifying a last stack trace that is associated with one of the one or more interesting  
3     tags; and  
4         producing the report based on the identified one or more of the stack traces.

1     9. The method according to claim 6, wherein:  
2         the tags indicate respective addresses of allocated objects; and  
3         the one or more interesting tags indicate one or more respective addresses of migrated  
4     objects.

10. A computer-readable medium bearing instructions for analyzing a program, said  
2 instructions being arranged to cause one or more processors upon execution thereby to  
3 perform the steps of:  
4 logging a plurality of stack traces and respective tags in a log file at respective points  
5 during execution of the program; and  
6 marking one or more interesting tags within the log file.

11. The computer-readable medium according to claim 10, further bearing  
2 instructions for performing the step of:  
3 producing a report based on the log file.

12. The computer-readable medium according to claim 11, wherein the step of  
2 producing the report includes:  
3 identifying one or more of the stack traces that are associated with any of the one or  
4 more interesting tags; and  
5 producing the report based on the identified one or more of the stack traces.

13. The computer-readable medium according to claim 11, wherein producing the  
2 report includes:  
3 identifying a last stack trace that is associated with one of the one or more interesting  
4 tags; and  
5 producing the report based on the identified one or more of the stack traces.

14. The computer-readable medium according to claim 10, wherein:  
2 the tags indicate respective addresses of allocated objects; and  
3 the one or more interesting tags indicate one or more respective addresses of migrated  
4 objects.

15. A computer-readable medium bearing instructions for producing a diagnostic report for a program, said instructions being arranged to cause one or more processors upon execution thereby to perform the steps of:

accessing a log file comprising a list of stack traces and respective tags at respective points during execution of the program and comprising one or more interesting tags; and

producing the diagnostic report based on the log file.

16. The computer-readable medium according to claim 15, wherein the step of producing the report includes:

identifying one or more of the stack traces that are associated with any of the one or more interesting tags; and

producing the report based on the identified one or more of the stack traces.

17. The computer-readable medium according to claim 15, wherein producing the report includes:

identifying a last stack trace that is associated with one of the one or more interesting tags; and

producing the report based on the identified one or more of the stack traces.

18. The computer-readable medium according to claim 15, wherein:  
the tags indicate respective addresses of allocated objects; and  
the one or more interesting tags indicate one or more respective addresses of migrated objects.

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